

UNITED STATES DISTRICT COURT
DISTRICT OF NEW HAMPSHIRE

Joseph N. Masello

v.

Civil No. 08-cv-136-JL
Opinion No. 2011 DNH 061

The Stanley Works, Inc.
and ZAG Industries, Ltd.

MEMORANDUM ORDER

The parties to this wrongful death action arising from the collapse of a plastic stepstool have challenged the admissibility of each other's proffered expert testimony. The stepstool was manufactured by defendant ZAG Industries, Ltd. and allegedly distributed by or on behalf of defendant The Stanley Works, Inc. The stool collapsed as Joseph M. Masello was standing on it while restocking products during an overnight shift at the store where he worked, the Christmas Tree Shops location in Salem, New Hampshire. Masello fell backward and struck his head against the floor, sustaining an injury that caused him to fall into a coma that night and to die two weeks later.

Masello's son has brought this action in his capacity as the administrator of the estates of both his father and his mother, Masello's wife, who was alive at the time of Masello's death but has since died of unrelated causes.¹ The complaint asserts

¹For clarity's sake, the court will use "Masello" to refer to the father and "the plaintiff" to refer to the son in his capacity here.

state-law claims of negligent design and failure to warn, strict products liability, and breach of warranty against both defendants. This court has diversity jurisdiction over this action between the plaintiff--who, acting on behalf of decedents who were New Hampshire citizens when they died, is treated as a New Hampshire citizen, see 28 U.S.C. § 1331(c)(2)--and the defendants, which are a Connecticut corporation and an Israeli corporation. See id. § 1332(a)(3).

To support his claims at trial, the plaintiff intends to rely on the expert testimony of Myer Ezrin, a plastics engineer. Ezrin plans to testify that the stool failed when one of its front legs cracked, beginning at the point where the leg connected to a rib on the underside of the bottom step, and that this occurred largely because the rib and the leg were designed to meet at a sharp corner, rather than a rounded one. The defendants have moved to preclude Ezrin from offering these opinions, arguing that they are "the product of speculation" and therefore inadmissible. The defendants have also moved for summary judgment, see Fed. R. Civ. P. 56, arguing that, without the challenged opinion testimony, the plaintiff has no proof that any defect in the stool caused Masello's fatal injury.

For his part, the plaintiff has moved to preclude one of the defendants' designated experts, Miki Birnbaum, from opining that the stool "was reasonably designed and was fit for its ordinary

and reasonably foreseeable uses.” The plaintiff argues that Birnbaum, who works as an engineer for ZAG, lacks the qualifications necessary to give this opinion, that the opinion lacks sufficient support, and that, in any event, it is cumulative of the testimony anticipated from another of the defendants’ designated experts.

As fully explained below, the parties’ motions to exclude each others’ experts’ opinions are denied, because they rely on alleged deficiencies that go to the weight, rather than the admissibility, of those opinions. It follows that the defendants’ motion for summary judgment, which is based solely on the claimed inadmissibility of Ezrin’s opinions, is also denied.²

I. Applicable legal standard

“The touchstone for the admission of expert testimony in federal court litigation is [Federal Rule of Evidence 702](#).” [Crowe v. Marchand](#), 506 F.3d 13, 17 (1st Cir. 2007). Under that rule,

If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form

²While this court ordinarily holds oral argument on all dispositive motions, counsel indicated during a recent telephone conference with the court that they saw no need for that approach in this instance.

of an opinion or otherwise, if (1) the testimony is based upon sufficient facts or data, (2) the testimony is the product of reliable principles and methods, and (3) the witness has applied the principles and methods reliably to the facts of the case.

Fed. R. Evid. 702. As the structure of this rule suggests, before the factfinder in a case can consider expert testimony over the adverse party's objection, the trial judge, serving as "gatekeeper," must determine whether the testimony satisfies the relevant foundational requirements. See Daubert v. Merrell Dow Pharms., Inc., 509 U.S. 579, 597 (1993). While the party seeking to introduce the testimony bears the burden of proving its admissibility, id. at 592, the burden is not especially onerous, because "Rule 702 has been interpreted liberally in favor of the admission of expert testimony." Levin v. Dalva Bros., Inc., 459 F.3d 68, 78 (1st Cir. 2006).

II. Background

The body of the Handy 2-Step stool consists of a single piece of molded polypropylene plastic. As its name suggests, the Handy 2-Step has two steps, connected by four legs. Each of the legs ends in an outward pointing "toe" with a rubber tip on the bottom. The underside of each of the steps consists of a number of supporting ribs running in a perpendicular direction from the center to the front or back side of the step. The bottom edge of

each of the intersections between a rib and the front side of the step is rounded so that the rib meets the step at a radius of 5 millimeters. There are also two ribs, running parallel to the bottom step, that connect it to the inside of each of the front legs. The bottom edges of these ribs are not rounded.³

In Masello's accident, the left front leg of the stool cracked into several pieces, causing it to collapse. One of Masello's fellow employees subsequently retrieved the stool and three broken pieces of the left front leg, but was unable to locate the toe. The parties disagree over whether the toe broke off in the accident and could not be found afterwards or whether the toe had already broken off before Masello stepped on the stool that night.⁴ An inspection of the stool after the accident

³The defendants state that each of these edges actually has a radius of 0.5 mm, but explain that they have assumed, for purposes of their motion to exclude Ezrin's testimony, that the edge has no radius.

⁴The evidence on this point supports conflicting inferences. On the one hand, the defendants emphasize that other Christmas Tree Shops employees could not locate the missing piece, despite a dedicated search of the area, and that a post-accident inspection of the stool revealed that pieces had broken off other legs as well. On the other hand, the plaintiff emphasizes that the floors of the store were cleaned just hours after the accident occurred, and that a Christmas Tree Shops employee testified that she inspected all of the stools before Masello's shift that night and did not notice that any of them were broken.

revealed a crack running upward from the intersection of the rib connecting the broken leg to the bottom step.

III. Analysis

A. The defendants' motion to preclude Ezrin's testimony

Ezrin holds an undergraduate degree in chemistry from Tufts and a doctorate in organic chemistry from Yale. Before his retirement in 2006, he worked as a plastics engineer for some 55 years, roughly half of it for private companies, including Dupont and Monsanto, and the other half of it in academia, where he was affiliated with the Institute of Materials Science at the University of Connecticut. He has published a full-length book and numerous articles on plastics failure.

As noted briefly at the outset, Ezrin plans to testify that

Fracture of the front leg, supporting one side of the lower step of the stool, was due, in large part, to stress applied in service at a point where a rib, fused to an inner part of the leg, had sharp corners in the rib. In good design of plastic parts it is well known that the structure of high stress points should not have sharp corners and particularly be supported by only one rib. These focus applied stress over a small area, increasing the likelihood of fracture. Good design calls for ribs to have a curved, i.e., radiused, connection to the part. That way stress is distributed over a larger area.

Citing four separate published articles, Ezrin explains that

"problems caused by sharp corners, including fracture, have been

well known for years" in the field of plastics design. Ezrin also relies on an internal 1997 memorandum by a ZAG engineer about the design of the Handy 2-Step. The memorandum states, in relevant part, "This is of most importance--we need all the connecting points of ribs to body to be with a radius of 5 mm so it will not break at these points." The defendants nevertheless challenge Ezrin's opinion that, as predicted by ZAG's engineer, the stepstool's front leg did indeed break at the point where it met the rib, and did so due largely to the lack of a radius.

First, the defendants argue that, even if it is "conceded" that "a sharp corner is more susceptible to fracture than a corner with a radius" (which is not much of a concession in light of the identical opinion expressed by ZAG's own engineer in the 1997 memo), Ezrin still "makes an illogical leap from his belief that the rib juncture could have been stronger with a radiused corner to his belief that the rib juncture was the location of failure." But there is nothing "illogical" in the notion that a product has broken in the place where, as Ezrin explains, plastic objects are "well known"--and well documented--to break. As the Supreme Court has observed, "no one denies that an expert might draw a conclusion from a set of observations based on extensive and specialized experience." [Kumho Tire Co. v. Carmichael](#), 526 U.S. 137, 156 (1999).

The defendants do not take issue with Ezrin's assertion that sharp corners in plastic design are commonly the source of fracture. Of course, it does not necessarily follow from that proposition alone that the sharp corner between the left front leg and the supporting rib was the source of the fracture here, but Rule 702 does not limit qualified experts to "unassailable" conclusions, just "'methodologically reliable'" ones. [United States v. Mahone](#), 453 F.3d 68, 72 n.1 (1st Cir. 2006) (quoting [Ruiz-Troche v. Pepsi Cola of P.R. Bottling Co.](#), 161 F.3d 77, 85 (1st Cir. 1998)). Ezrin's conclusion that a plastic object broke where plastic objects are generally known and documented to break cannot be dismissed as "unreliable" and therefore inadmissible under Rule 702--at least without some indication that "reliable principles and methods" of plastics engineering exclude this sort of commonsense reasoning.

The defendants have provided no such indication, whether in the form of an opinion from their own retained expert, an industry publication, or otherwise. Instead, they argue that Ezrin "ignores any other location on the left front leg as a potential location of the fracture initiation," particularly "the missing piece of the leg (the toe)." But Rule 702 "does not require an expert to take into account every possible factor when giving an opinion." 3 Louis R. Frumer & Melvin I. Friedman,

Products Liability § 18A.04[6][e], at 18A-80.11-12 (1960 & 2010 supp). So Ezrin's "failure" to account for the possibility that the toe was missing before Masello used the stool is no basis for disallowing his testimony.

In any event, there is conflicting evidence as to whether the toe from the left front leg was in fact missing before Masello stood on the stool, or went missing when the stool fractured. See note 4 and accompanying text, supra. Resolving these conflicts, and assessing the credibility of any expert who has done the same in reaching his opinions, are tasks for the jury. See, e.g., Crowe, 506 F.3d at 18; Newell P.R., Ltd. v. Rubbermaid, Inc., 20 F.3d 15, 20 (1st Cir. 1994).

Second, the defendants argue that, even if Ezrin has correctly identified the sharp corner between the rib and the leg as the source of the fracture, he did "not use a reliable methodology to conclude that the lack of radius [there] caused the crack." Ezrin concludes that "[a] contributor to fracture was that the rib with sharp corners was at or very near the high applied stress point" where the leg meets the step, deviating from "well known guidelines of good design of plastics." He further explains that it is "well known" that sharp corners "focus applied stress over a small area, increasing the

likelihood of fracture," while a rounded corner reduces that likelihood by distributing the stress over a larger area.

Like Ezrin's opinion as to where the fracture started, then, his opinion as to why it started is based on the "well known" principle that sharp corners in plastic objects tend to break more than rounded corners. The defendants do not question this principle and, indeed ZAG's own engineer specifically recommended that the Handy 2-Step have rounded corners at "the connecting points of ribs to body . . . so it will not break at these points" (emphasis added). Contrary to the position the defendants have now taken, the notion that, when a product lacked a feature generally recognized to prevent it from breaking, it was the lack of that feature that caused the product to break, cannot properly be characterized as "speculative." Cf. [Sikora v. AFD Indus.](#), 221 F. Supp. 2d 920, 923 (N.D. Ill. 2002) (admitting, in products liability case, expert's opinion "formed by comparing the evidence before him [about the product] with the knowledge he has gathered working in the [relevant] industry").

The defendants emphasize that Ezrin made no calculations as to the amount of stress placed on the junction of the left front leg and its supporting rib when Masello stood on the stool.⁵

⁵With his objection to the defendants' motion to exclude Ezrin's testimony, the plaintiff filed a supplementation, dated

But, again, the defendants have not come forward with anything suggesting that this calculation is an essential part of any reliable methodology for determining why a plastic object failed. If the lack of such calculations indeed call Ezrin's opinion into question, the defendants can make that point through cross-examination at trial. Their motion to preclude him from testifying is denied.

B. The plaintiff's motion to exclude Birnbaum's testimony

The plaintiff, for his part, has moved to preclude one of the defendants' designated experts, Miki Birnbaum, from offering expert opinion at trial that the Handy 2-Step "was reasonably designed and was fit for its ordinary and reasonably foreseeable uses." The plaintiff argues that (1) Birnbaum is not qualified to give that opinion, (2) it is "not supported by any scientific journals or literature," and (3) it is cumulative of the opinion

February 17, 2011, offering Ezrin's calculation of the stress applied to the left front leg of the stool when Masello stood on it, and concluding that the figure was "an extraordinary [*sic*] high amount of stress which is why the leg fractured and collapsed." In their reply, the defendants object to this supplementation as "too late and unfairly prejudicial," noting that it was produced well beyond the deadlines for expert supplementations and depositions, and the day before the summary judgment deadline. Because the court rules that Ezrin's opinions are admissible even without the supplementation, there is no need to consider at this point whether its late disclosure prevents the plaintiff from relying on the supplementation at trial.

testimony expected from another of the defendants' designated experts. None of these arguments suffices to prevent Birnbaum from offering his opinion as to the design of the stepstool.

First, Birnbaum has a bachelor's degree in mechanical engineering, and has worked as ZAG's engineer in charge of testing its plastic products for the past 15 or so years. As Masello emphasizes, Birnbaum has no education or experience in designing plastic products, for ZAG or anyone else (before working there, he held jobs designing automatic process machines and testing cars for handicapped drivers), and--unlike Ezrin--"has never published any literature, written any articles, taught a class, or hosted a seminar on plastics or design."

In the court's view, however, this lack of experience in plastics design does not disqualify Birnbaum from giving the challenged opinion, in light of the nature of the opinion itself. "Whether a witness is qualified can only be determined by the nature of the opinion he offers." [Gladhill v. Gen. Motors Corp.](#), 743 F.2d 1049, 1052 (4th Cir. 1984). In concluding that the Handy 2-Step "was reasonably designed and was fit for its ordinary and reasonably foreseeable uses," Birnbaum does not purport to rely on any design expertise. Instead, he relies on the results of product testing in which, among other things, the stool "withstood a 1,200 pound load," which is "far beyond any

load the stool would reasonably be expected to see in real life." Birnbaum has spent the last 15 years testing ZAG's plastic products to determine whether they will hold up under everyday use. This experience qualifies him to opine on whether, based on such testing, the Handy 2-Step was in fact "reasonably designed and was fit for its ordinary and reasonably foreseeable uses."⁶ As the court of appeals has explained, "an expert need not have design experience with the particular product in order to render expert opinion about the []reasonableness of its design." [Tokio Marine & Fire Ins. Co. v. Grove Mfg. Co.](#), 958 F.2d 1169, 1175 (1st Cir. 1992).

Second, as this court has explained, [Rule 702](#) does not require an expert to buttress his testimony with references to published materials. See [Warford v. Indus. Power Sys.](#), 2008 DNH 105, 10-11. Instead, whether a theory "'has been subjected to peer review and publication,'" while relevant in determining the admissibility of expert testimony under some circumstances, "may

⁶This does not rule on whether Birnbaum is qualified to testify to everything set forth in his expert report, e.g., his opinions that the sharp corners where the front legs met their supporting ribs "did not play any role in this accident," which occurred because "the left front leg was missing a piece, including the rubber tip" so it "had nothing to hold it against the floor, and the leg pushed out" when Masello stepped onto the stool. Because the plaintiff's motion does not address these and like opinions in Birnbaum's report, the court has not addressed them.

not be" in other circumstances, "'depending on the nature of the issue, the expert's particular expertise, and the subject of his testimony.'" Id. at 10 (quoting Kumho, 526 U.S. at 149-50 (further internal quotation marks omitted)).

In Warford, this court identified one such set of circumstances as where a witness in a products liability case offers expert testimony based on his own experience with the product. Id. at 10-11. This court called it "immaterial--and unsurprising" that the witness would base his opinions on his own experience, "rather than peer-reviewed studies or other published literature." Id. at 11 (citing 3 Frumer & Friedman, supra, § 18A.04[6][f], at 18A-80.11). The same observations apply to Birnbaum's opinion that the Handy 2-Step was safe for its intended use, which, as just discussed, is based on his experience in testing it and similar products.

Third, while Rule 403 authorizes the court to exclude otherwise admissible testimony to avoid "needless presentation of cumulative evidence," the plaintiff has not shown that Birnbaum's testimony is in fact needlessly duplicative of that of the defendants' other designated liability expert. Indeed, the plaintiff has not provided the court with any of the other expert's anticipated testimony, which essentially makes any determination of cumulativeness impossible at this point.

As the plaintiff emphasizes, courts have used Rule 403 to exclude cumulative expert opinion testimony, see, e.g., Upsher-Smith Labs., Inc. v. Mylan Labs., Inc., 944 F. Supp. 1411, 1440 (D. Minn. 1996) (citing cases), but have not laid down a per se rule that a party can have only a single expert witness offer the same conclusion, cf. Green Constr. Co. v. Kan. Power & Light Co., 1 F.3d 1005, 1013 (10th Cir. 1993) (noting that limits on overlapping expert testimony should not be imposed "on the basis of mere numbers"). If the trial testimony of Birnbaum and the defendants' other designated liability expert devolves into the "needless presentation of cumulative evidence," the court can take appropriate action at that time. The plaintiff's motion to exclude Birnbaum's opinion at this point is denied.

C. The defendants' motion for summary judgment

As noted at the outset, the defendants have also moved for summary judgment, but have done so on the sole basis that Ezrin's opinions are inadmissible, rendering Masello unable to prove his claims. So, because the court has denied the defendants' motion to exclude Ezrin's opinions, their motion for summary judgment must also be denied.

IV. Conclusion

For the foregoing reasons, Masello's motion to exclude Birnbaum's opinion testimony⁷ is DENIED, the defendants' motion to exclude Ezrin's testimony⁸ is DENIED, and the defendants' motion for summary judgment⁹ is DENIED.

SO ORDERED.

A handwritten signature in black ink, appearing to read "Joe Laplante", written over a horizontal line.

Joseph N. Laplante
United States District Judge

Dated: April 13, 2011

cc: Daniel W. Buckley, Esq.
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⁷Document no. 38.

⁸Document no. 40.

⁹Document no. 44.